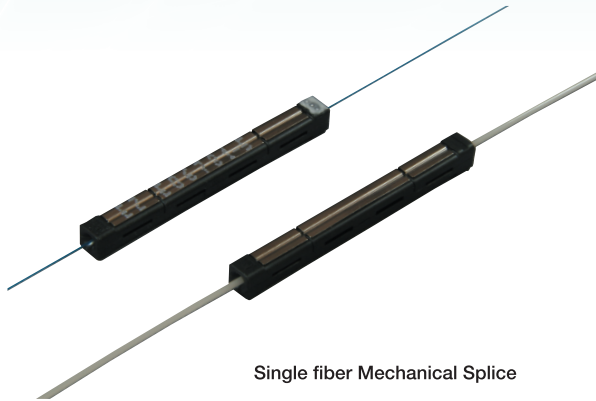


Mechanical Splice

Mechanical Splice Unit



Single fiber Mechanical Splice

Features

Mechanical splice connection makes use of mechanical splice unit where 2 fibers are first inserted into the unit. The fibers are next aligned and then held in position by clamping parts.

- Fast and Easy splicing of 250 or 900um SM/MM fibers.
- Power source not required, all necessary tools are provided in the standard tool kit.
- Much faster compared to fusion splicing method

Structure

Mechanical splice connection is done by using the mechanical splice shown in Figure 1. Fibers are set to the V-groove of the mechanical splice. The fibers are held in place by clamping with the clamping parts. Index matching gel is added to the center of the mechanical splice (at the supposed connection point of the two fibers) to ensure good insertion and return loss.

Figure 2 and Figure 3 show the inner structure of the mechanical splice. Both the 0.25mm section and 0.125mm (bare fiber) section of the fiber are being clamped and held in position. Therefore, to ensure good connection, both the fiber stripping length and the fiber cleaved length must be controlled within specifications.

Figure 2-1

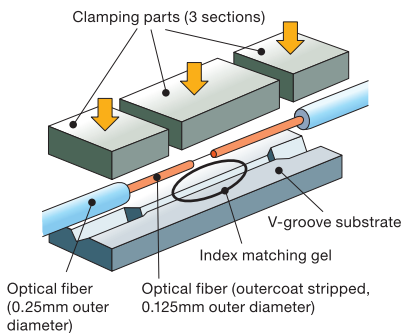


Figure 2-2

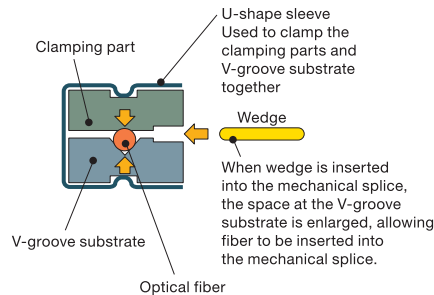


Figure 1

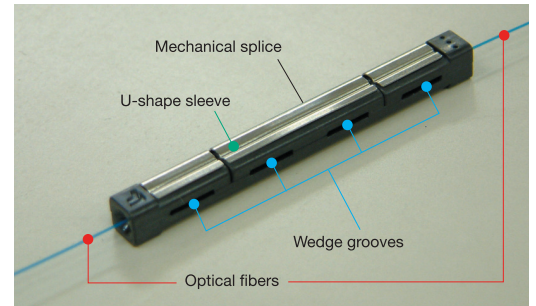
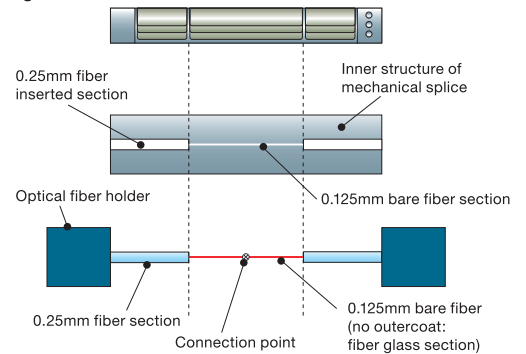


Figure 3



Specifications

Type	Mechanical Splice Unit	Remark
Product Code	FMSEZ-025/09	
Application	Dia.0.25mm single fiber or Dia.0.9mm single fiber	Cladding : 0.125mm Except Nylon coating fibers
Applicable fiber diameter range	Dia.0.235mm to 0.265mm , Dia. 0.85mm to 0.95mm	ITU-T compliance
Size	L40 x W4 x H4 (mm)	
Connection Loss	Average < 0.1dB	
Return Loss	≥ 40dB	
Fiber Adhesion Force	< 3N (Connection Loss change < 0.2dB)	
Required Tools	Single fiber MS/EZ Assembly tool	